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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE APPLICATION NO. 2127 P4098 Radia J. Perlman 09/767,128 01/22/2001 **EXAMINER** 12/13/2005 45774 7590 CHEUNG, MARY DA ZHI WANG KUDIRKA & JOBSE, LLP ONE STATE STREET, SUITE 800 PAPER NUMBER **ART UNIT** BOSTON, MA 02109 3621

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicat	ion No.	Applicant(s)		
Office Action Summary		09/767,1	28	PERLMAN, RAD	PERLMAN, RADIA J.	
		Examine	r	Art Unit		
		Mary Che	eung	3621		
Period fo	The MAILING DATE of this communicate Reply	ation appears on th	e cover sheet wit	th the correspondence a	ddress	
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAINS IS LONGER, FROM THE MAINS IS IN (6) MONTHS from the mailing date of this community period for reply is specified above, the maximum statustic to reply within the set or extended period for reply will eply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	ILING DATE OF TO 37 CFR 1.136(a). In no ex- nication. tory period will apply and v II, by statute, cause the app	HIS COMMUNIC vent, however, may a re will expire SIX (6) MONT plication to become ABA	CATION.  uply be timely filed  THS from the mailing date of this ANDONED (35 U.S.C. § 133).		
Status		. •				
1)	Responsive to communication(s) filed on <u>26 September 2005</u> .					
2a)□	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
· ,	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
-	Claim(s) <u>1-37</u> is/are pending in the application.					
	4a) Of the above claim(s) <u>12-16 and 21-27</u> is/are withdrawn from consideration.  5) Claim(s) is/are allowed.					
	6)⊠ Claim(s) <u>1-11,17-20 and 28-37</u> is/are rejected.					
	Claim(s) are subject to restriction	on and/or election	requirement	·		
ا ال	oralin(s) are subject to restricte	on and/or cicculon	requirement.			
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)☐ All b)☐ Some * c)☐ None of:						
	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
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			•	•		
Attachmen	He)					
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 4/30/01;7/5/01.  5) Notice of Informal Patent Application (PTO-152)  6) Other:						

Art Unit: 3621

#### **DETAILED ACTION**

#### Status of the Claims

1. This action is in response to the RCE filed on September 26, 2005. Claims 1-37 are pending. Claims 12-16 and 21-27 are withdrawn. Claims 1-2, 4-6 and 8-11 are amended. Claims 1-11, 17-20 and 28-37 are examined.

#### Response to Arguments

2. Applicant's arguments with respect to claims 1-11, 17-20 and 28-37 have been considered but are most in view of the new ground(s) of rejection.

#### Claim Objections

3. Claim 35 is objected to because of the following informalities: in line 2, the phrase "-a said principal" should be "said principal". Appropriate correction is required.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-2, 4-5, 6-11, 17-18, 20, and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over de Silva et al., U. S. Patent 6,564,320 in view of Kent, U. S. Patent 6,671,804.

As to claim 1, de Silva teaches a method for certificate generation that enables efficient revocation of said certificate generated by an untrustworthy registration authority, comprising (abstract and column 4 line 65 – column 5 line 10):

Art Unit: 3621

At a the registration authority (local server 202 of Figs. 6-8):

- Receiving a request from a principal to issue a certificate on behalf of that principal (column 12 lines 3-12 and Figs. 6-8);
- Forwarding said request to a certification authority (column 12 lines 12-15 and Figs. 6-8);

At the certification authority (central server 104 of Figs. 6-8):

• In response to receipt of the request, generating a certificate (column 4 lines 44-58 and column 12 lines 15-19 and Figs. 6-8).

De Silva does not explicitly teach that the forwarded the certificate request includes a first identifier that identifies the registration authority, and the certificate is generated further includes said first identifier. However, Kent teaches the registration authority forwarding the certificate request includes the identifier of the registration authority (column 9 line 32 – column 10 lines 5 and Fig. 5), and if the identity of the registration authority is positively identified, generating a certificate (column 10 line 1 – column 11 line 14). Kent does not explicitly teach the generated certificate must include the identifier of the registration authority; however, Kent teaches the certificate includes specific authority information such as certificate authority, attribute authority, registration authority (column 7 lines 36-62). It would have been obvious to one of ordinary skill in the art to allow the certificate in Kent's teaching include the identity of the registration authority for better protecting information from unauthorized usage. Furthermore, it would have been obvious to one of ordinary skill in the art to allow the forwarded certificate request in de Silva's teaching to include the identifier of the registration

Art Unit: 3621

authority, and the generated certificate includes said identifier as taught by the modified teaching of Kent better for better protecting information from unauthorized usage.

As to claims 2 and 35, de Silva does not specifically teach the request further includes a second identifier that identifies the principal. However, Kent teaches this matter (column 9 lines 40-47). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the request information in the teaching of de Silva to include a second identifier that identifies the principal because this would allow the system more securely monitoring transactions among the different terminals for better protecting the secrecy of each transaction.

As to claim 4, de Silva teaches authenticating said certificate by said certificate authority (column 4 lines 55-67).

As to claim 5, de Silva teaches authenticating said certificate comprises generating a certificate digitally signed by said certificate authority (column1 lines 48-50 and column 11 lines 34-44).

As to claim 6, De Silva does not specifically teach generating a certificate digitally signed by said certificate authority <u>using a private key of a public private key pair</u>

<u>associated with said second node</u>. However, Kent teaches this matter (column 10 lines 40-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the certificate in the teaching of de Silva to be signed by using a private key of a public private key pair associated with said second node because this would allow the system more securely monitoring transactions among the different terminals and preventing unauthorized access of the certificate.

**Art Unit: 3621** 

As to claim 7, de Silva teaches the certificate includes a time stamp that identifies expiration time (column 4 line 65 – column 5 line 10). Kent teaches using time stamps to auditing trails (column 11 lines 29-47). De Silva modified by Kent does not specifically teach the certificate includes a time stamp that identifies a time associated with the request. It would have been obvious to one of ordinary skill in the art to allow the time stamp in the teaching of de Silva modified by Kent to include a time associated with the request because this would allow the system more securely tracking each transaction and preventing authentication of the certificate outside the valid time period.

As to claim 8, de Silva teaches authenticating said request by said registration authority (column 4 lines 41-53).

As to claim 9, de Silva specifically teaches digitally signing the certificate against subsequent tampering (column 1 lines 48-50). De Silva does not explicitly digitally signing said request by said registration authority. However, Kent teaches this matter (column 9 lines 40-53). It would have been obvious to one of ordinary skill in the art to allow the certificate request in de Silva's teaching to be signed by the registration authority as taught by Kent for preventing unauthorized access of the information.

As to claim 10, De Silva does not specifically teach the certificate is digitally signed by using a private key of a public/private key pair associated with said first node. However, Kent teaches this matter (column 9 lines 40-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the certificate request in de Silva's teaching to be signed by using a private key of a public/private key pair associated with said registration authority because this would

Art Unit: 3621

allow the system more securely monitoring transactions among the different terminals and preventing unauthorized access of the information.

As to claim 11, de Silva teaches the certificate includes a time stamp that is associated with expiration time (column 4 line 65 – column 5 line 10). Kent teaches using time stamps to auditing trails (column 11 lines 29-47). De Silva modified by Kent does not specifically teach the certificate includes a time stamp that is associated with a time and date when said request was received by said certificate authority. It would have been obvious to one of ordinary skill in the art to allow the time stamp in de Silva modified by Kent to include a time and date associated with said request was received by the certificate authority because this would allow the system more securely tracking each transaction and preventing authentication of the certificate outside the valid time period.

As to claim 37, de Silva further teaches revoking untrustworthy certificates (column 1 lines 11-15, 55-58 and column 4 line 65 – column 5 line 10).

Claims 17-18, 20, 34 and 36 are rejected for the similar reasons as claims 1, 4 and 11.

6. Claims 3, 19 and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over de Silva et al., U. S. Patent 6,564,320 in view of Kent, U. S. Patent 6,671,804, and in further view of Vaeth et al., U. S. Patent 6,308,277.

As to claims 3 and 19, the modified method of de Silva and Kent teaches generating a certificate as discussed above. De Silva modified by Kent does not specifically teach said certificate further includes a public key associated with said principal, and said second identifier. However, Vaeth teaches this matter (column 4

Art Unit: 3621

lines 34-57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow said certificate in the teaching of de Silva modified by Kent further includes a public key associated with said principal, and said second identifier because this would allow the system more securely monitoring transactions among the different terminals and preventing unauthorized access of the certificate.

Claims 28 and 30 are rejected for the similar reasons as claims 1-3 as discussed above.

As to claims 29 and 31, de Silva teaches the certificate includes a time stamp that is associated with expiration time (column 4 line 65 – column 5 line 10). Kent teaches using time stamps to auditing trails (column 11 lines 29-47). De Silva modified by Kent does not specifically teach the certificate includes a time stamp that is associated with a time or receipt by said certification authority of said request from said registration authority of said request to issue said certificate. It would have been obvious to one of ordinary skill in the art to allow the time stamp in de Silva modified by Kent to include a time and date associated with a time of receipt by said certification authority of said request from said registration authority of said request to issue said certificate because this would allow the system more securely tracking each transaction and preventing authentication of the certificate outside the valid time period.

As to claim 32, de Silva teaches the computer program code includes program code for publishing said certificate (column 4 lines 57-58).

As to claim 33, de Silva teaches the program code for publishing said certificate includes program code for forwarding said certificate to a directory server (column 12 lines 14-19).

Art Unit: 3621

### Inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Cheung whose telephone number is (571)-272-6705. The examiner can normally be reached on Monday – Thursday from 10:00 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached on (571) 272-6712.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax phone number for the organization where this application or proceedings is assigned are as follows:

(571) 273-8300 (Official Communications; including After Final

Communications labeled "BOX AF")

(571) 273-6705 (Draft Communications)

Mary Cheung Primary Examiner Art Unit 3621 December 12, 2005

